# TITLE V OPERATING PERMIT STATEMENT OF BASIS

Facility Name: Chula Vista Energy Center LLC

**Title V Permit No.:** APCD2007-TVP-978119

**Permit Application Nos.:** APCD2015-APP-004073 (Title V renewal)

**Site ID:** APCD2000-SITE-03752

**Equipment Address:** 3497 Main Street

Chula Vista, CA 91911

**Facility Contact:** Harold E. Dittmer Responsible Official

**Contact Phone:** (916) 447-5171

**Permit Engineer:** Michael Beto **Date Completed:** 5/26/2016

# 1.0 Purpose/Introduction

This statement of basis describes a renewal Title V permit covering a stationary twin pack natural gas-fired combustion turbine permitted under District permit APCD2008-PTO-976039. The basis for submittal under Title V is that the facility is subject to the acid rain program under Title IV of the Federal Clean Air Act (CAA) which requires Title V permitting pursuant to 40 CFR § 70.3.

# 2.0 Background

Since the last Title V renewal, there have been no other changes to the Title V permit. Potential emissions in relation to the permit have not changed. There have been no emission changes since the original issuance of the permit.

# 3.0 Facility Description

The facility comprises of a stationary twin pack natural gas fired turbine generator. The twin pack turbine generator is a Pratt & Whitney, Model FT4/GG, rated at a generation capacity of 44 MW with a heat input of 688 MMBtu/hr. The unit is equipped with dry-low NOx combustors, selective catalytic reduction (SCR) system including an automatic ammonia injection control system, continuous emissions monitoring system (CEMS) and a data acquisition and handling system (DAHS). The emission unit is summarized in the following table.

Permit Number	Source Category	
APCD2008-PTO-976039	Turbine (1) – Electric Generation	

# 4.0 Title IV (Acid Rain) and Title V Permitting

The facility is subject to the acid rain provisions under District Rule 1412 and Title IV of the federal CAA, as given at 40 Code of Federal Regulation (CFR) § 72.6(a). Under the acid rain program, an *affected source* (a term specifically defined in Title IV of the CAA, and which applies to this facility) is subject to Title V permitting pursuant to District Rule 1401 and 40 CFR § 70.3(a)(4).

# 5.0 Applicable Requirements

#### 5.1 Summary by Pollutant

Turbine		
Pollutant	Primary Limiting Regulation(s)	
NOx	Rule 20.3 (NSR); Rule 69.3.1; 40 CFR 60 Subpart GG	
SO2	Rule 20.3; Rule 62; Rule 53; 40 CFR 60 Subpart GG	
VOC	Rule 20.3;	
CO	Rule 20.3; (AQIA only)	
PM10	Rule 20.3; Rule 53	
Toxic Pollutants	Rule 1200	

# 5.2 <u>Discussion</u>

The above table summarizes those rules on which the permit conditions are based. The permittee must comply with the most stringent requirement, as cited in the permit, which also serves as the compliance measure for the less stringent requirements.

#### District Rule 20.2

Rule 20.2 provides for new source review (NSR) with the introduction of any new or modified unit. This rule was considered at the time of the original A/C twin pack turbine. Rule 20.2 is also the basis for the aforementioned new provisions for tuning, testing and maintenance.

# 40 CFR 60 Subpart KKKK

40 CFR 60 Subpart KKKK – *Standards of Performance for Stationary Combustion Turbines* (adopted by reference in District Regulation X) applies to stationary combustion turbines with a heat input at peak load 10 MMBtu/hr. (HHV of the fuel), which commenced construction, modification, or reconstruction after February 18, 2005. Applicability to this rule carries an explicit exemption from 40 CFR 60 Subpart GG.

The twin pack turbine was installed prior to 2005 and has not had modifications since; therefore the turbine is not subject to 40 CFR 60 Subpart KKKK.

# 40 CFR 60 Subpart GG

The stationary twin pack natural gas-fired combustion turbine was determined to be subject to this new source performance standard *Standards of Performance for Stationary Gas Turbines* (adopted by reference in District Regulation X), which applies to stationary gas turbines that were constructed, modified or reconstructed after October 3, 1977. Both turbines are subject to this subpart and have permit conditions to include the applicable requirements.

# 6.0 Monitoring, Recordkeeping and Reporting

Pursuant to New Source Review (NSR) the turbines are required to operate and maintain the CEMS to measure NOx and CO which are also required by District Rules 69.3, 69.3.1, and 40 CFR 60 Subpart GG.

Monitoring and testing are required in the existing District permits. For the related Title V permit, additional recordkeeping and reporting are required pursuant to District Rule 1421.

Compliance Assurance Monitoring (CAM) under 40 CFR Part 64 was considered for this review. None of the emission units fulfill the criteria for applicability under Part 64. Additionally, the turbines are equipped with continuous emissions monitoring systems (CEMS), which also excludes them from being subject to CAM under § 64.2 (b)(vi).

# 7.0 Permit Shield

In accordance with District Rule 1410(p) and 40 CFR Part 70.6(f), a permit can include a provision precluding the permittee from enforcement action for certain requirements that either do not apply or that are superseded by another requirement to which the permittee is subject, as stated in the permit. A permit shield, if granted, is limited as given by the aforementioned regulations.

The applicant has requested to maintain the existing permit shields, which are provided at Section II. C. of the permit. The requirements listed in the permit shield, were evaluated against the provisions of the aforementioned regulations. Each listed requirement in the permit shield was determined to be acceptable because it is superseded in stringency by another requirement given in the permit.

#### 8.0 Outside Review

In accordance with District Rule 1415, the District is submitting the proposed draft permit for public notice and review by EPA Region 9 and affected states.

# 9.0 <u>Conclusions / Recommendations</u>

The source is expected to comply with all applicable requirements including those cited in the current District permit as well as those under District Rule 1401 and Title V. Therefore, the recommendation of this report is for the subject initial Title V permit to be issued following public notice and EPA review.